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10/618,402

07/11/2003

Ah Chong Tee

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09/24/2004

HEWLETT-PACKARD COMPANY

Intellectual Property Administration

P.O. Box 272400

Fort Collins, CO 80527-2400

EXAMINER

HSIEH, SHIH WEN

ART UNIT

PAPER NUMBER

2861

DATE MAILED: 09/24/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

|                              |                               |                            |  |
|------------------------------|-------------------------------|----------------------------|--|
| <b>Office Action Summary</b> | Application No.<br>10/618,402 | Applicant(s)<br>TEE ET AL. |  |
|                              | Examiner<br>Shih-wen Hsieh    | Art Unit<br>2861           |  |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 11 July 2003.
- 2a) ☐ This action is **FINAL**.      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-5 and 7-11 is/are rejected.
- 7) ☒ Claim(s) 6 and 12 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11 July 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

**DETAILED ACTION**

***Claim Objections***

1. Claims 5 and 6 are objected to because of the following informalities:

In regard to:

Claim 5:

a rack and pinion gear connected to \_\_\_\_\_ translate a driveshaft rotation into a lateral motion of a movable plate disposed within the elevator.

There seems lacking of a device/subject matter in the blank indicated above.

Claim 6 has the same situation as that in claim 5.

Appropriate correction is required.

***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-3, 5, 7-9 and 11 are rejected under 35 U.S.C. 102(b) as being anticipated by Gast et al. (US Pat. No. 5,455,609).

In regard to:

Claim 1:

Gast et al. teach:

A printer, comprising:

an inkjet print head (14a, 14b, fig.1) for printing ink;

a cap (22a, 22b, fig.2) proximate to the inkjet print head and providing for a sealing of it to prevent drying of unused ink; and

an elevator (20, figs. 2 and 6) connected to the cap and providing for movement of the cap away from the print head to allow printing, and allowing for movement to the print head to allow for sealing and the preventing of ink drying, refer to col. 5, lines 13-28.

Claim 2:

Gast et al. further teach:

wherein: the elevator derives its up and down movement by drawing a movable platform (34, fig. 3) along a set of ramps (18b, fig. 3), refer to col. 5, line 65 to col. 6, line 3; col. 6, lines 31-64.

Claim 3:

Gast et al. further teach:

wherein: the elevator includes locks to hold it in its down and away position during printing, refer to col. 6, lines 21-30.

Note: based on Gast et al.'s teaching, the worm gear (38) and the stepper motor (28) forms a locking device, i.e., locking the service station in either capping position or in non-capping position.

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Claim 5:

Gast et al. further teach:

a rack (34) and pinion gear (36) connected to translate a driveshaft (28b) rotation into a lateral motion of a movable plate (also the rack 34, because the rack has to attach to a structure, in this case, a plate, which is movable so long as the rack moves) disposed within the elevator, refer to col. 5, line 65 to col. 6, line 1.

Note:

A lateral motion is a linear motion, while the motion occurs in a horizontal direction, it is a horizontal motion, while it occurs in a vertical direction, it is a vertical motion.

Claims 7-9 and 11:

These method claims correspond to apparatus claims 1-3 and 5 respective, their steps are deemed to be made inherent by the functions of the structure in the combination discussed above.

### ***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

5. Claims 4 and 10 are rejected under 35 U.S.C. 103(a) as being obvious over Gast et al.

The applied reference has a common assignee (H & P) with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art only under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 103(a) might be overcome by: (1) a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not an invention "by another"; (2) a showing of a date of invention for the claimed subject matter of the application which corresponds to subject matter disclosed but not claimed in the reference, prior to the effective U.S. filing date of the reference under 37 CFR 1.131; or (3) an oath or declaration under 37 CFR 1.130 stating that the application and reference are currently owned by the same party and that the inventor named in the application is the prior inventor under 35 U.S.C. 104, together with a terminal disclaimer

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in accordance with 37 CFR 1.321(c). For applications filed on or after November 29, 1999, this rejection might also be overcome by showing that the subject matter of the reference and the claimed invention were, at the time the invention was made, owned by the same person or subject to an obligation of assignment to the same person. See MPEP § 706.02(I)(1) and § 706.02(I)(2). Both cases deal with a service station to service a print head.

In regard to:

Claim 4:

The device of Gast et al. DIFFERS from claim 4 in that it does not teach: wherein: the elevator occupies an area within a printing zone of the inkjet print head and thereby provides for a narrower overall width.

A service station disposed in the print zone, and in the instant application an elevator mounted with a capping device, is well known in the art, refer to MPEP 2144.03, In re Malcolm, 129 F.2d 529, 54 USPQ 235 (CCPA 1942).

Therefore it would have been an obvious matter to place a service station, and in the instant application, the elevator, in the print zone as a common practice in an ink jet printer for the purpose of shortening the length of the printer as a result of not disposing the service station outside the print zone.

Claim 10:

This method claim corresponds to apparatus claim 4, its step is deemed to be made obvious by the functions of the structure in the combination discussed above.



***Allowable Subject Matter***

6. Claims 6 and 12 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

7. The following is a statement of reasons for the indication of allowable subject matter:

In regard to:

Claim 6:

The primary reason for the allowance of claim 6 is the inclusion of the limitation of a set of corner pins and ramps connected to translate said lateral motion of said movable plate into an up and down motion of the elevator. It is this limitation found in this claim, as it is claimed in the combination that has not been found, taught or suggested by the prior art of record, which makes this claim allowable over the prior art.

Claim 12:

The primary reason for the allowance of claim 12 is the inclusion of the method step of using a set of corner pins and ramps to translate said lateral motion of said movable plate into an up and down motion of the elevator. It is this step found in this claim, as it is claimed in the combination that has not been found, taught or suggested by the prior art of record, which makes this claim allowable over the prior art.

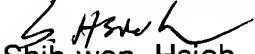
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8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shih-wen Hsieh whose telephone number is 571-272-2256. The examiner can normally be reached on 7:30AM -5:00PM.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, S D Meier can be reached on 571-272-2149. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

**SHIH-WEN HSIEH**  
**PRIMARY EXAMINER**

  
Shih-wen Hsieh  
Primary Examiner  
Art Unit 2861

SWH

  
Sept. 23, 2004